

isc Silicon PNP Power Transistor**2SA1076****DESCRIPTION**

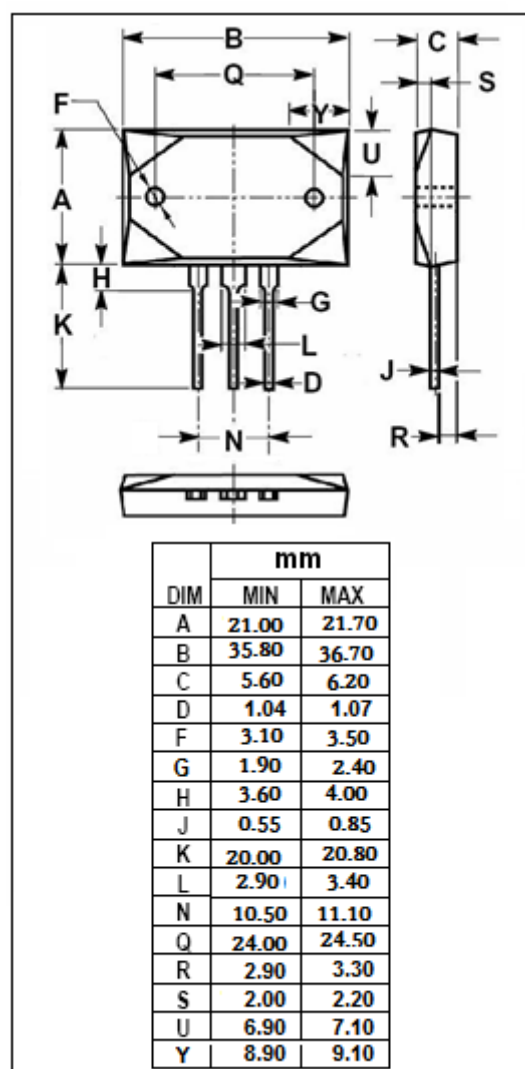
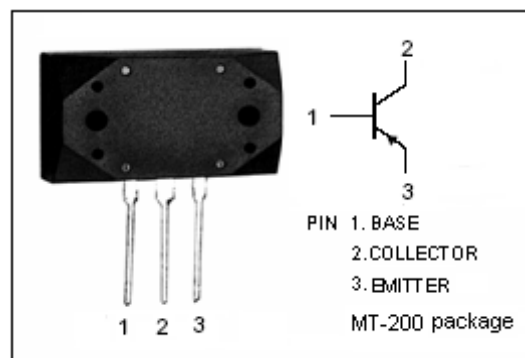
- High Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -160V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SC2526

APPLICATIONS

- Power amplifier applications
- switching regulators
- DC-DC converter applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-160	V
V_{CEO}	Collector-Emitter Voltage	-160	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current-Continuous	-12	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	120	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-65~150	$^\circ\text{C}$



isc Silicon PNP Power Transistor**2SA1076****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter –Base Breakdown Voltage	I _C = -50μA ; I _B = 0	-7			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -1mA ; I _B = 0	-160			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = -50μA ; I _B = 0	-160			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -5A; I _B = -0.5A		-0.9	-1.8	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -160V; I _E = 0			-50	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = -160V; R _{EB} =∞			-1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -7V; I _C =0			-50	μ A
h _{FE-1}	DC Current Gain	I _C =-1A; V _{CE} = -5V	60		200	
h _{FE-2}	DC Current Gain	I _C = -7A; V _{CE} = -5V	40			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V; f _{test} = 1.0MHz		300	470	pF
f _T	Current-Gain—Bandwidth Product	I _E = -1A; V _{CE} = -10V, f=10MHZ	45	60		MHz

Switching times

t _{on}	Turn-on Time	I _C = -7.5A , R _L = 4Ω , I _{B1} = -I _{B2} = -0.75A		0.15		μ s
t _{stg}	Storage Time			0.5		μ s
t _f	Fall Time			0.11		μ s